

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KOICHI NUMAZAWA, NORIKO YAMAKAWA,
YOSHIICHI SUZUKI and ICHIRO KAWAMURA

Appeal No. 95-0110
Application 07/953,783¹

HEARD FEBRUARY 5, 1998

Before METZ, GARRIS and WALTZ, **Administrative Patent Judges.**

METZ, **Administrative Patent Judge.**

DECISION ON APPEAL

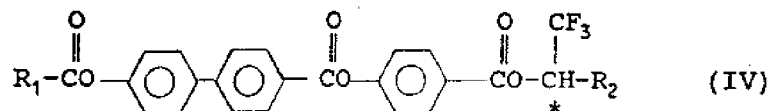
This is an appeal under 35 U.S.C. § 134 from the
examiner's refusal to allow claims 11 and 12, all the claims
remaining in this application.

¹ Application for patent filed September 30, 1992. On this
record, said application is stated to be a division of Serial
Number 07/557,845, filed on July 25, 1990, and now U.S. Patent
Number 5,207,946, issued May 4, 1993.

The appealed subject is directed to certain ferroelectric chiral smectic liquid crystal compounds. The compounds are said to be useful in electro-optical display devices.

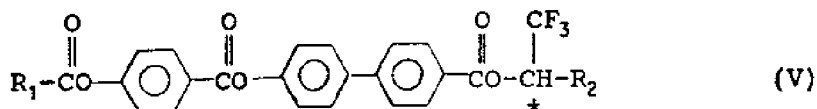
Claims 11 and 12, each directed to liquid crystal compounds, *per se*, are reproduced below for a more facile understanding of appellants' invention.

11. A liquid crystal compound represented by formula (IV):



wherein R₁ and R₂ each represents an alkyl group having from 4 to 15 carbon atoms and the compound exhibits tristability when in an S₍₃₎^{*} phase.

12. A liquid crystal compound represented by formula (V):



wherein R₁ and R₂ each represents an alkyl group having from 4 to 14 carbon atoms and the compound exhibits tristability when in an S₍₃₎^{*} phase.

OPINION

The sole reference of record which is being relied on as evidence of lack of novelty or, alternatively, as evidence of obviousness is:

Suzuki et al. (Suzuki) 4,973,738 November 27, 1990

Claims 11 and 12 stand rejected under 35 USC 102(e) as being anticipated by Suzuki, or, alternatively, as being unpatentable from Suzuki under 35 USC 103. We reverse.

Suzuki describes novel ferroelectric liquid crystal compounds defined by formulae I and II (column 2, line 19 through column 3, line 10). The compounds are said to be useful in electro-optical image or display elements (column 1, lines 7 through 11). Useful methods for preparing the compounds are set forth from column 4, line 11 through column 12, line 31.

The examiner's stated position under 35 USC 102(e) is set forth on page 5 of the Answer wherein it is recited that:

Suzuki discloses in claim 1 an optically active trifluoromethylated compound like the compounds of the instant application. The core rings can be phenyl or biphenyl. Although not specifically shown, they are claimed in claim 1. (emphasis ours)

Manifestly, a reference which discloses compounds which are only "like" the compounds claimed by appellants cannot describe, in the sense of 35 USC 102, the invention claimed by appellants. Moreover, as noted by appellants in their brief and as well-

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emphasized by appellants' legal representative at the oral hearing, claim 1 of the Suzuki patent recites in the preamble that the compound claimed is a "liquid crystal compound of a naphthalene nucleus represented by the formula..." (emphasis added). Thus, we interpret Suzuki's claim 1 as requiring at least one of the substituents "A" or "B" to be a naphthalene nucleus. Additionally, the " R_1 " moiety in formula I of claim 1 of Suzuki is an alkyloxycarbonyl ($ROC=O$) radical unlike appellants' moiety in the same position which is a ($R_1C=OO$) radical. Accordingly, the rejection of the claims as anticipated by Suzuki cannot be affirmed.

We have not overlooked the fact that the Suzuki disclosure is broader in scope than Suzuki's claims. Specifically, Suzuki's disclosure does not recite or require that at least one of the substituents "A" or "B" is a naphthalene moiety. Nonetheless, even under the theory of anticipation stated in ***In re Schaumann***, 572 F.2d 312, 315-317, 197 USPQ 5, 9 and 10 (CCPA 1978) (a theory which we note the examiner has not advanced) the rejection under 35 USC 102(e) is not sustainable.

The court in Schaumann held that anticipation may be found in a reference which does not describe *ipsimis verbis* a particular compound but does describe a pattern of preferences and also describes a definite and limited number of compounds.

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Here Suzuki's disclosure of suitable R_1 substituents does not define appellants' $R_1C=OO$ moiety. Because the Suzuki disclosure, like Suzuki's claims, does not describe appellants' R_1 substituent, Suzuki does not anticipate in the sense of 35 USC 102, under any theory, the subject matter recited in appellants' claims.

The examiner's statement of the alternative rejection of the claims under 35 USC 103 is inadequate, both legally and factually. Indeed, the totality of the rejection may be found at page 5 of the Answer wherein it is stated that:

it would have been obvious to one of ordinary skill in the art to make the claimed compounds based upon the teachings of the reference, specifically claim 1.

However, as we stated above, Suzuki's claim 1 requires that at least one of the substituents "A" or "B" is a naphthalene moiety. Suffice it to say the examiner has failed to analyze appellants' claims vis-à-vis the prior art in the manner required in **Graham v. John Deere Co.**, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

The examiner has also opined that Suzuki discloses compounds with " R_1 " moieties which moieties are the reverse ester analogues of appellants' claimed moieties $R_1C=OO$ and, thus, "are expected to have a similar result on the compound." However, as the proponent of the theory that Suzuki's "reverse ester" moieties would have been expected to confer the same or similar

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properties on the compound, *per se*, as appellants' $R_1C=OO$ moieties would confer on appellants' claimed compounds, *per se*, it was incumbent upon the examiner to provide some evidence supporting this theory. This the examiner has failed to do.

Finally, because we have determined that the examiner has failed to establish that appellants' claimed compounds would have been *prima facie* obvious from Suzuki's disclosure, it was unnecessary for appellants to come forward with countervailing evidence of non-obviousness. Having said that, however, we note that we have considered the Kawamura declaration and find that it at least establishes a certain degree of unpredictability with respect to $S_{(3)}^*$ phase temperature width within the broad family of compounds arguably embraced by Suzuki's disclosure but bearing appellants' $R_1C=OO$ moiety. Accordingly, the examiner's pronouncement that appellants' claimed compounds would have been expected to have properties similar to the compounds disclosed by Suzuki on the apparent theory that compounds with similar structures would be expected to have similar properties is not only unfounded but is also contrary to the only evidence in this record which addresses the issue.

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For all the reasons stated above, the rejection of claims 11 and 12 as being anticipated under 35 USC 102(e) or, alternatively, as being obvious under 35 USC 103 over Suzuki is reversed.

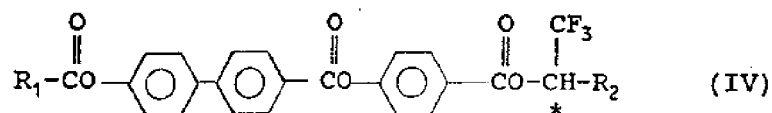
REVERSED

ANDREW H. METZ)	
Administrative Patent Judge)	
)	
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BRADLEY R. GARRIS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
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THOMAS A. WALTZ)	
Administrative Patent Judge)	

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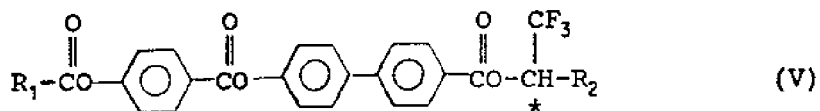
Sughrue, Mion, Zinn, Macpeak
& Seas
2100 Penn. Ave. N.W.
Washington, DC 20037

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